

PATENT SPECIFICATION

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DRAWINGS ATTACHED

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(54) IMPROVEMENTS IN OR RELATING TO SHAVING DEVICES

(71) We, WILKINSON SWORD LIMITED, a British Company of Sword Works, Southfield Road, London, W.4, England, formerly of 16 Pall Mall, London, S.W.1, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to holders for shaving units.

According to the present invention there is provided a holder for a shaving unit, said shaving unit consisting of a substantially rigid member to which a razor blade is secured in a permanent manner with the rigid member having a guard surface located at a pre-set spacing from the cutting edge of the blade, wherein said holder comprises means for ejecting a shaving unit from said holder when the shaving unit is to be replaced.

The invention also provides a holder for a shaving unit, said shaving unit consisting of a substantially rigid member to which a razor blade is secured in a permanent manner with the rigid member having a guard surface located at a pre-set spacing from the cutting edge of the blade, comprising a catch which is movable between a first position at which it retains a shaving unit in the holder and a second position at which it no longer retains said shaving unit in the holder, and means for initiating movement of said shaving unit out of said holder, said initial movement causing said catch to move to said second position.

One construction of holder and shaving unit in accordance with the present invention will now be described, by way of example, with reference to the accompanying drawings in which:—

Figure 1 is a rear elevation of the holder with part of the rear cover broken away to show the inside of the holder;

Figure 2 is a part-sectional side elevation of the holder;

Figure 3 is an underneath view of the shaving unit;

Figure 4 is a sectional side elevation of

the head of the holder on a larger scale than that of Figure 2;

Figure 5 is a similar view to Figure 4 showing the shaving unit being ejected from the holder; and

Figure 6 is a front view of the head of the holder on an enlarged scale, with the shaving unit in position, partly broken away to show the inside of the head of the holder.

The drawings show a shaving unit 20 having a razor blade 19 secured in a permanent manner to the substantially rigid body of the shaving unit 20 with a guard surface 20a located at a pre-set spacing from the cutting edge of the blade 19. In use a shaving unit 20 is located in the holder 21 between jaws 22 and 23, the shaving unit 20 being held in position by engagement of the head 25a of a spring loaded detent 25 within an aperture 26 (see Figure 4) in the underside of the shaving unit 20.

The shaving units will normally be stored in a dispenser, for example of one of the kinds described and illustrated in British Patent Specification 1,160,542. When a shaving unit 20 is to be withdrawn from a dispenser by use of the holder 21, the jaws 22 and 23 of the holder are presented to the rear of the shaving unit 20 so that the inner surface of the lower jaw 23 will engage with the underside of the shaving unit 20 and the inner surface of the upper jaw 22 will engage with the upper surface of the shaving unit 20. As the jaws 22, 23 are moved into engagement with the shaving unit 20, the head 25a of the detent 25 engages with a cam surface 27 (Figures 3, 4 and 5) which extends from the rear edge of the shaving unit 20 to the aperture 26, the cam surface 27 causing progressive depression of the detent 25 against the reaction of a detent spring 28 until the movement of the shaving unit 20 into the jaws 22 and 23 is such that the detent head 25a snaps into position in the aperture 26 (as seen in Figure 4) thereby positively locating the shaving unit 20 within the jaws 22, 23 of the holder.

When the shaving unit is no longer fit for further use and is to be dispensed with, in order that a further shaving unit may be

5 picked up by the holder, an ejector button 29 which projects from the rear of the holder 21 is depressed and causes forward movement of the upper end of a cantilever ejector spring 30. The engagement of the upper end of spring 30 with the rear edge of the shaving unit 20 causes the shaving unit to move outwardly from the jaws 22, 23 of the holder with consequent depression of the detent 25 against the reaction of spring 28 thereby releasing the detent from its engagement in the locating aperture 26 as shown in Figure 5. The curved surface 25a of the head of the detent 25 rides out of the aperture 26 and comes into engagement with the initial portion of cam surface 27. Consequently, reaction occurs between the cam surface 27 and the detent 25 due to the spring pressure which is urging the detent upwardly resulting in the application of a force to the shaving unit 20 which accelerates its outward movement from the jaws of the holder to give positive and rapid ejection of the shaving unit. When the thumb or finger pressure is removed from the ejector button 29 the latter is restored to its normal position by the pressure of the ejector spring 30.

30 As can be seen from Figure 6 the two coiled portions 31, 32 of spring 28 fit respectively over lugs 33, 34 of detent 25 and the central link portion 35 of spring 28 bears on the underside 36 of detent 25. The two end links 37, 38 of spring 28 fit respectively in recesses 39, 40 provided in the rear component 24 of the holder with the head of the detent 25 located in a central slot 41 in the jaw 23. The detent 25 and spring 28 are located in position by the engagement of the front component 42 with the rear component 24. Balance weights 43, 44 are secured to the inner face of the front component 42.

45 It will be appreciated that the above described construction is only one of many possible ones by which the desired ejection of a shaving unit may be achieved.

WHAT WE CLAIM IS:—

50 1. A holder for a shaving unit, said shaving unit consisting of a substantially rigid member to which a razor blade is secured in a permanent manner with the

rigid member having a guard surface located at a pre-set spacing from the cutting edge of the blade, wherein said holder comprises means for ejecting a shaving unit from said holder when the shaving unit is to be replaced.

2. A holder for a shaving unit, said shaving unit consisting of a substantially rigid member to which a razor blade is secured in a permanent manner with the rigid member having a guard surface located at a pre-set spacing from the cutting edge of the blade, comprising a catch which is movable between a first position at which it retains a shaving unit in the holder and a second position at which it no longer retains said shaving unit in the holder, and means for initiating movement of said shaving unit out of said holder, said initial movement causing said catch to move to said second position.

3. A holder according to Claim 2, wherein said catch is urged under pressure towards said first position and, after initial movement of said shaving unit, the pressure applied to said catch acts upon said shaving unit to accelerate its movement out of said holder.

4. A holder according to either Claim 2 or 3, wherein a surface of said shaving unit is shaped so that the initial movement of said shaving unit causes movement of said catch from said first position to said second position.

5. A holder according to any one of Claims 2 to 4 wherein said catch, in said first position, enters a recess in said shaving unit.

6. A holder according to any one of the preceding claims, wherein initial movement of said shaving unit out of said holder results from pressure applied by the user to a release member.

7. A holder for a shaving unit, substantially as described herein.

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rigid member having a guard surface located at a pre-set spacing from the cutting edge of the blade, wherein said holder comprises means for ejecting a shaving unit from said holder when the shaving unit is to be replaced. 55

2. A holder for a shaving unit, said shaving unit consisting of a substantially rigid member to which a razor blade is secured in a permanent manner with the rigid member having a guard surface located at a pre-set spacing from the cutting edge of the blade, comprising a catch which is movable between a first position at which it retains a shaving unit in the holder and a second position at which it no longer retains said shaving unit in the holder, and means for initiating movement of said shaving unit out of said holder, said initial movement causing said catch to move to said second position. 60 65 70

3. A holder according to Claim 2, wherein said catch is urged under pressure towards said first position and, after initial movement of said shaving unit, the pressure applied to said catch acts upon said shaving unit to accelerate its movement out of said holder. 75

4. A holder according to either Claim 2 or 3, wherein a surface of said shaving unit is shaped so that the initial movement of said shaving unit causes movement of said catch from said first position to said second position. 80 85

5. A holder according to any one of Claims 2 to 4 wherein said catch, in said first position, enters a recess in said shaving unit.

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